

REMARKS

In the November 26, 2003 Office Action, the Examiner rejected claims 1, 3-6, 8-10, and 12-19 pending in the application. This Response amends claims 1, 3, 4, 10, 15-17 and 19. Support for the amended claims may be found in the originally filed specification, and thus, no new matter is added by this amendment. After entering the foregoing amendments, claims 1, 3-6, 8-10, and 12-19 (4 independent claims; 16 total claims) remain pending in the application. Reconsideration is respectfully requested.

35 U.S.C. §112 REJECTION

Claims 3 and 4 stand rejected under 35 U.S.C. §112, second paragraph, "as being indefinite for failing to particularly pointout and distinctively claim the subject matter which Applicant regards as the invention". In particular, the Examiner stated "it appears that these claims have improper dependency since claim 2 has been cancelled." Applicant has amended claims 3 and 4 to have proper dependency to claim 1.

35 U.S.C. §102(e) REJECTION

Claims 1, 4-5, 8, 10, and 12-19 stand rejected under 35 U.S.C. §102(e) as being anticipated by Lee et al., U.S. Patent No. 6,333,635, issued December 25, 2001 (hereinafter "Lee"). In particular, the Examiner stated that "Lee et al. disclose in Figure 8-9 having a head plate sub-structure (34), a plurality of rectangular beam assemblies (36a, 36b) mounted to the head plate (34) and a plurality of probe needles (30b) extending through the rectangular assemblies (36a, 36b) wherein each probe needle has a first end extending through one of the rectangular beam assemblies and a second end for contacting the integrated circuit and wherein each of the rectangular assemblies comprise a support beam (36a) in a probe guide (an element located directly under the beam (36a)) wherein the first end of each needle extended through the probe guide." Applicants respectively traverse this rejection.

Lee generally discloses a probe card for use in testing at least two chips at the same time. A probe card includes a plurality of pins for probing contact pads formed on the chips and a fixing ring extending around the aperture and position the pins relative to the test chips, in a

fixing bridge traversing the fixing ring and dispose of a region between two of the test chip locations. As illustrated in Figures 8-12 of Lee, the probe pins of the probe card have lengths that differ.

Applicants submit that each and every element of independent claims 1, 10, 15 and 20 are not disclosed by Lee. For example, in contrast to Lee, amended independent claim 1 provides for a probe card having “a plurality of probe needles of substantially equal length.” Similarly, amended independent claims 10 and 15 provide for a probe card assembly having a probe card with “a plurality of probe needles of substantially equal length.” In addition, amended independent claim 16 provides for a method of manufacturing a probe card that includes the step of “providing a plurality of probe needles of substantially equal length.” Lee does not disclose these recited elements.

Thus, Lee does not disclose each and every element of amended independent claims 1, 10, 15 and 16. Support for the amendments to independent claims 1, 10, 15 and 16 can be found in the original filed specification. No new matter has been introduced.

For the above reasons, Applicants submit that each and every element of independent claims 1, 10, 15, and 16 are not disclosed by Lee. Accordingly claim 1 (and claims 4, 5 and 8 which depend from claim 1), claim 10 (and claims 12-14, each of which variously depend from claim 10), claims 15 and 16 (and claims 17-19, each of which variously depend from claim 16) are not anticipated by Lee and Applicants respectively request withdrawal of the rejection of claims 1, 4-5, 8, 10, and 12-19 under 35 U.S.C. §102(e).

35 U.S.C. §103 REJECTION

Claims 6 and 9 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Lee. In particular, the Examiner stated that “it would have been obvious for one of ordinary skill in the art to provide the beam assembly of Lee et al. with approximately 800 to 2,500 probe needles so that these probe needles would make contact with a tiny semi-conductor device under a test with so many test points.” In addition, the Examiner stated that “since there are many probe needles for making contact with test points when a very tiny device under test, it would have been obvious for one of ordinary skill in the art to have the pitch of the needle would be less than 100m so that many probe needles would be able to contact tiny dense test points arranged on a tiny semi-conductor device under tests.” Applicants respectively traverse this rejection.

Applicants submit that Lee does not provide for all the elements of independent claim 1 (claims 6 and 9 depend upon independent claim 1) as recited above. For the above reasons, Applicants submit that the invention of claims 6 and 9 would not have been obvious over Lee and therefore claims 6 and 9 are allowable. Accordingly, Applicants respectively request the withdrawal of the rejection of claims 6 and 9 under 35 U.S.C. §103(a).

CONCLUSION

In view of the foregoing, Applicant respectfully submits that all of the pending claims fully comply with 35 U.S.C. § 112 and are allowable over the prior art of record. Reconsideration of the application and allowance of all pending claims is earnestly solicited. Should the Office wish to discuss any of the above in greater detail or deem that further amendments should be made to improve the form of the claims, then the Office is invited to telephone the undersigned at the Office's convenience.

Respectfully submitted,

Date: 26-May-2004

By: David O. Caplan
David O. Caplan
Reg. No. 41,655

Snell & Wilmer L.L.P.
One Arizona Center
400 East Van Buren
Phoenix, Arizona 85004-2202
(602) 382-6284
(602) 382-6070 - Facsimile